

# *Grizzly* *Industrial, Inc.*®

## MODEL H8124 7.2 MINI GRINDER KIT INSTRUCTION MANUAL



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## **WARNING!**

**This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.**

**Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.**

**The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**

## **WARNING!**

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.**

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# SECTION 1: SAFETY

## **WARNING**

### **For Your Own Safety Read Instruction Manual Before Operating This Equipment**

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

## **NOTICE**

This symbol is used to alert the user to useful information about proper operation of the equipment.

## **WARNING**

### **Safety Instructions for Machinery**

- 1. READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
- 5. WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power OFF and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ON.
17. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
18. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
19. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
20. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
21. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
22. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
23. **BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION** in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.

# WARNING

## Additional Safety Instructions for Mini Grinder

- 1. READ THIS MANUAL.** This manual contains proper operating instructions for this grinder.
- 2. OPERATION.** DO NOT force the grinder against the workpiece. Firmly grasp the grinder and ease it against the workpiece using light pressure.
- 3. WORK AREA CONDITIONS.** DO NOT use this grinder in a damp or wet location. Keep work area well lit. Do NOT use in the presence of flammable gases or liquids.
- 4. GRINDER DESIGN.** DO NOT force this tool beyond its capabilities. DO NOT modify this tool and do not use this grinder for any purpose for which it was not intended.
- 5. AVOID UNINTENTIONAL STARTING.** Be sure the switch is in the OFF position when not in use and before plugging it in. DO NOT carry any tool with your hand on the power switch, whether it is energized or not.
- 6. SHARP SURFACES.** DO NOT place hands near the tooling surfaces of the grinder when in operation.
- 7. DISCONNECT POWER.** Always remove the battery before making any adjustment, changing tools, or performing any maintenance to the grinder.
- 8. MACHINE INSPECTIONS.** Perform machine inspections and maintenance service as required.
- 9. FLEX SHAFT.** DO NOT use the flex shaft with a tight bend. This may cause binding and damage the inner spindle.
- 10. CLAMP THE WORKPIECE.** DO NOT hold the workpiece with one hand and operate the grinder with the other.
- 11. ATTEND TO YOUR GRINDER.** Never walk away from the grinder and leave the tool running.
- 12. TEST RUN.** Always test run the grinder before starting any work.

# WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

# CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this mini grinder and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

# WARNING

## Additional Safety Instructions for Batteries and Chargers

- 1. CHARGING EQUIPMENT.** Only charge using the charger and batteries supplied with your grinder. **DO NOT** use batteries or charges from other cordless tools.
- 2. CHARGING ENVIRONMENT.** Charge battery on a dry, hard surface in a shaded location with good ventilation. **DO NOT** place charger on or near flammable materials. **DO NOT** cover the charger when charging. Only charge the battery when the temperature is between 50°F–104°F (10°C–40°C). Charging in temperature beyond these extremes will damage the battery.
- 3. CHARGER VOLTAGE.** **ONLY** plug into a circuit that is 110-120V. Connecting into 220V will damage the charger, possibly causing a fire or an explosion. **DO NOT** charge from a DC power supply or a generator.
- 4. CORD CARE.** Keep cord away from heat, oil, and sharp objects. **DO NOT** carry the charger by the cord, or pull the cord to unplug the charger.
- 5. CHARGER DAMAGE.** Replace charger if it has been dropped, damaged, or received a hard impact. Repair cord immediately if damaged.
- 6. SHORTING BATTERY.** Avoid touching both battery terminals simultaneously with skin to prevent injury from an electrical shock, or metal to prevent a fire from a spark. Storing the battery in a box of screws or nails can cause fire from a spark.
- 7. CORD LOCATION.** Prevent tripping over the cord by placing charger close to the power supply. Avoid using an extension cord.
- 8. DISCONNECT CHARGER.** Unplug the charger when cleaning, or when not in use.
- 9. BATTERY DISPOSAL.** The battery must be recycled or disposed of properly. **DO NOT** dispose of the battery in a landfill or incinerate. Combustion of some of the batteries' component materials can cause toxic fumes and possible explosion.

# SECTION 2: INTRODUCTION

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## Foreword

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We are proud to offer the Grizzly Model H8124 7.2V Mini Grinder Kit. This model is part of a growing Grizzly family of fine power tools. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

It is our pleasure to provide this manual with the Model H8124. It was written to encourage safety and to guide you through general operating procedures and maintenance.

The specifications, details, and photographs in this manual represent the Model H8124 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

## Contact Information

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If you have any comments regarding this manual, please write to us at the following address:

Grizzly Industrial, Inc.  
C/O Technical Documentation  
P.O. Box 2069  
Bellingham, WA 98227-2069  
E-Mail: manuals@grizzly.com

Most importantly, we stand behind our tools. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.  
1203 Lycoming Mall Circle  
Muncy, PA 17756  
Phone: (570) 546-9663  
Fax: (800) 438-5901  
E-Mail: techsupport@grizzly.com  
Web Site: <http://www.grizzly.com>

## Machine Data

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Dimensions..... 7<sup>1</sup>/<sub>2</sub>"L x 2"W  
Housing Construction .. High Impact Plastic  
Spindle & Collet Construction ..... Steel  
Collet ..... Brass  
Chuck Body Construction... Stainless Steel  
Power Required..... 7.2VDC NiCad Battery  
Battery Recharger ..... 120VAC to 9VDC  
Low Speed ..... 8,000 RPM  
High Speed..... 16,000 RPM  
LED Power Source. 7.2VDC NiCad Battery  
Weight of Grinder ..... 10<sup>1</sup>/<sub>2</sub> oz.  
Total Weight With Case .....3 lbs.



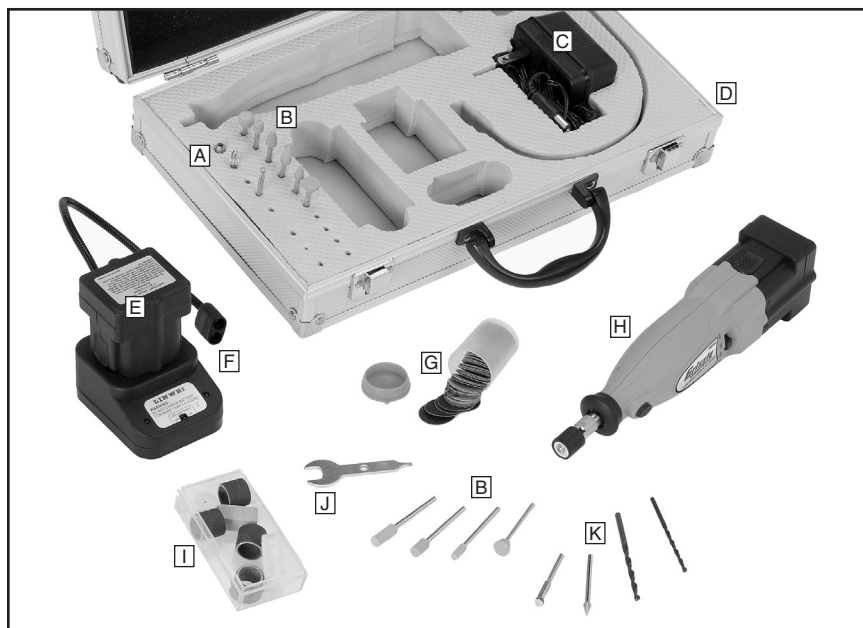
# SECTION 3: INVENTORY

Your Model H8124 was carefully packed when it left our warehouse. If you discover the Model H8124 is damaged after you have signed for delivery, *please call Customer Service immediately at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of the shipment, you should inventory the equipment.

The setup and operation instructions will be easier to understand if you first become familiar with the components of the Model H8124 7.2V Mini Grinder Kit. Match the letters in **Figure 1** with the inventory list below to identify each of the components that were shipped with your Model H8124.

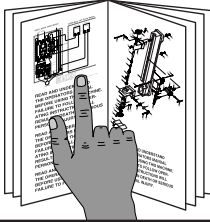


**Figure 1.** Model H8124 inventory

- |  |   |
|--|---|
| <b>A.</b> Collets                            | <b>H.</b> 7.2V Mini Grinder with Battery  |
| <b>B.</b> 10-Piece Mounted Stone Set         | <b>I.</b> Accessory Kit <ul style="list-style-type: none"><li>• 4-Piece Sanding Drum Set</li><li>• 2-Piece Buffing Wheel Set</li><li>• Square Stone Dresser</li></ul> |
| <b>C.</b> AC/DC Adapter                      | <b>J.</b> Collet Nut Wrench   |
| <b>D.</b> Carrying Case                      | <b>K.</b> Assorted Bits   |
| <b>E.</b> 7.2V NiCad Battery                 |   |
| <b>F.</b> Battery Charger With Gooseneck LED |   |
| <b>G.</b> Sanding Disc Set                   |   |

# SECTION 4: OPERATIONS

## WARNING



**Read the manual before operation. Become familiar with this machine, its safety instructions, and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.**

### Charging the Battery

To prevent potential problems during shipment, batteries are shipped with little or no charge. You must charge your new batteries before initial use.

**Note:** *The time needed to fully charge a battery is approximately 3–3½ hours.*

#### To charge the battery:

1. Make sure the AC/DC adapter is not connected to a power supply.
2. Connect the battery charger to the AC/DC adapter.
3. Press the two side tabs on the battery and slide the battery from the grinder.
4. Align the arrows on the battery with the arrows on the battery charger and press the battery into the battery charger until it snaps into place.

5. Plug the AC/DC adapter into a 110-120V power outlet.

—The green light on the battery charger will light when the battery charger is receiving power.

—The red light on the battery charger will light when a mounted battery is charging.

6. After 3–3½ hours in the energized charger, the battery will be fully charged. Remove the battery from the charger and unplug the AC/DC adapter.

**Note:** *DO NOT leave the battery in the energized charger indefinitely. The charger will NOT turn OFF automatically.*

## WARNING

**DO NOT leave the battery in the energized battery charger indefinitely. Overcharging the battery could lead to overheating both the battery and charger possibly resulting in a fire.**

## WARNING

**Make sure the grinder switch is turned OFF before installing the battery. Failure to heed this warning could result in serious personal injury.**

#### To install the battery into the grinder:

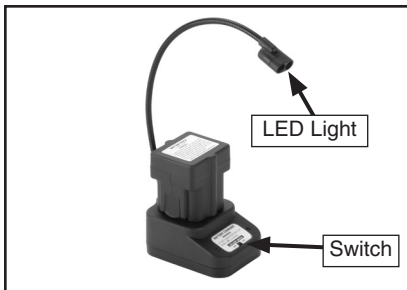
1. Align the arrows on the battery with the arrows on the grinder base.
2. Press the battery into the grinder until it snaps into place.

## Using the LED Gooseneck Work Light

The LED gooseneck work light is a hands-free solution to illuminating low light operations.

### To use the LED gooseneck work light:

1. DISCONNECT THE BATTERY CHARGER FROM THE AC/DC ADAPTER!
2. Mount a charged 7.2 NiCad battery into the battery charger (see **Figure 2**).
3. Use the small switch on the battery charger to turn the LED gooseneck work light ON and OFF.



**Figure 2.** LED gooseneck work light with battery installed.

## Installing Bits

The Model H8124 uses bits and cutters with a  $\frac{3}{32}$ " or a  $\frac{1}{8}$ " diameter shaft. See the Grizzly catalog or [www.grizzly.com](http://www.grizzly.com) for a complete listing of available bits and accessories.

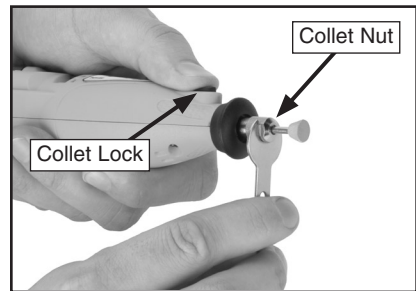
## **!**WARNING

**DO NOT** use bits or cutters with a cutting diameter larger than 1". The bit or cutter could break apart under the stresses of high speed use causing serious personal injury.

### To install a bit:

1. REMOVE THE BATTERY FROM THE GRINDER!
2. Depress the collet lock (see **Figure 3**) and loosen the collet nut with the collet wrench. The collet lock will engage as the collet rotates.

**Note:** It is not necessary to completely remove the collet nut from the shaft unless you are also changing the collet.



**Figure 3.** Collet lock.

3. Insert at least  $\frac{1}{2}$ " of the bit into the collet.
4. Hand tighten the collet nut while depressing the collet lock. Then, use the collet wrench to tighten the collet nut an additional  $\frac{1}{8}$  turn.

## **WARNING**

Failure to wear ANSI approved safety glasses while operating the grinder could cause serious personal eye injury.

### Using the Grinder

Most operations performed with the Model H8124 will give the best results at the high speed setting. However, the low speed setting is ideal when working with plastics or other materials that melt easily.

Always test the bit and speed combination on a scrap piece of material similar to the workpiece. Trial and error is the best way to determine the ideal setup.

#### To use the grinder:

1. Make sure the battery is charged and properly inserted into the grinder.
2. Grasp the grinder with a secure grip.
3. Turn the grinder **ON** by moving the switch to LO or HI.
  - The grinder speed at the LO setting is 8,000 RPM.
  - The grinder speed at the HI setting is 16,000 RPM.
4. Ease the working end of the bit against the workpiece with a light but steady pressure.
5. To turn the grinder **OFF**, move the switch to the OFF position.

### High Speed Uses

The high speed setting is best for general carving, cutting, routing, and grinding. The bit removes material more quickly at higher speed.

### Low Speed Uses

The lower speed setting is best for grinding and cutting materials that have low melting points. Plastics, in particular, often melt from the heat of friction generated at higher speeds. The low speed is also best for polishing and buffing when using the felt accessories included.

## **CAUTION**

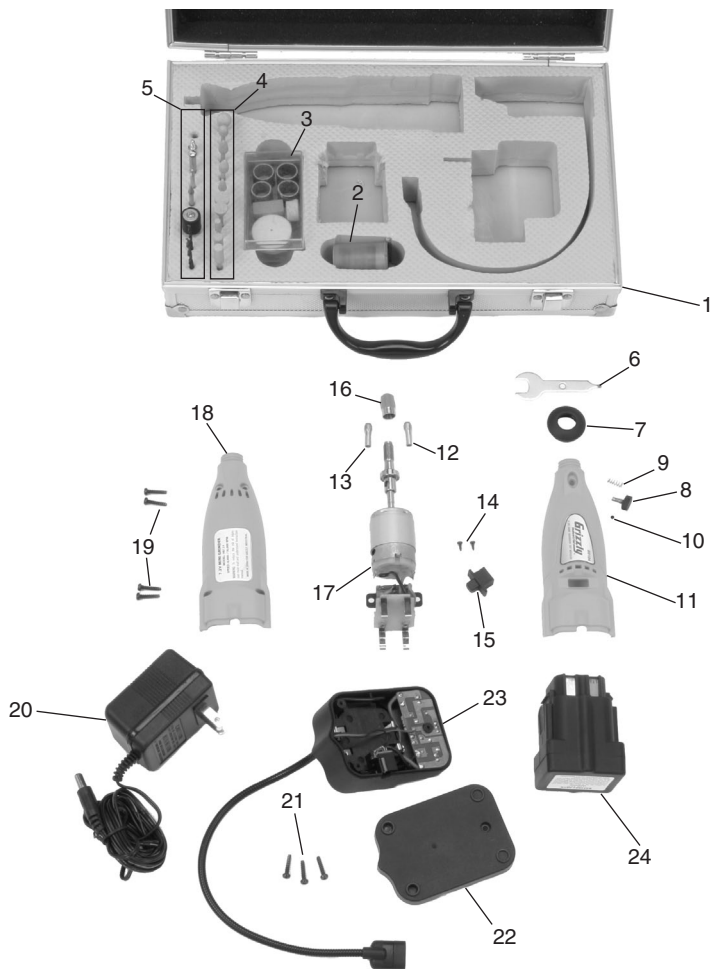
Use the low speed setting to reduce friction when working with plastics or other materials with low melting points. Some materials can liquefy from the heat of friction and be thrown into the operator, causing personal injury.

### Daily Maintenance

These procedures should be done after each use:

- Wipe the motor housing and tool bits with a dry cloth, or blow off the dust and debris with compressed air.
- Check for damage to bits, cords, housing, or other accessories.

# SECTION 5: PARTS LIST



REF	PART #	DESCRIPTION
1	PH8124001	CARRYING CASE
2	PH8124002	SANDING DISC SET
3	PH8124003	ACCESSORY KIT
4	PH8124004	MOUNTED STONE SET
5	PH8124005	ASSORTED BIT SET
6	PH8124006	COLLET NUT WRENCH
7	PH8124007	COLLET SHIELD
8	PH8124008	COLLET LOCK
9	PH8124009	SPRING
10	PH8124010	RETAINING RING
11	PH8124011	HOUSING FRONT HALF
12	PH8124012	COLLET 3/32"

REF	PART #	DESCRIPTION
13	PH8124013	COLLET 1/8"
14	PH8124014	TAP SCREW 2 X 5
15	PH8124015	SWITCH COVER
16	PH8124016	COLLET NUT
17	PH8124017	GRINDER MOTOR/SPINDLE ASSY
18	PH8124018	HOUSING BACK HALF
19	PH8124019	TAP SCREW 3 X 12
20	PH8124020	AC/DC ADAPTER 120VAC/9VDC
21	PH8124019	TAP SCREW 3 X 12
22	PH8124022	BATTERY CHARGER BASE
23	PH8124023	BATTERY CHARGER/LED ASSY
24	PH8124024	7.2V NI-CAD BATTERY

# WARRANTY AND RETURNS

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Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Authorization Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

**Grizzly Industrial, Inc.**  
**1203 Lycoming Mall Circle**  
**Muncy, PA 17756**  
**Phone: (570) 546-9663**  
**Fax: (800) 438-5901**

**E-Mail:**  
**techsupport@grizzly.com**

**Web Site: <http://www.grizzly.com>**

Thank you again for your business and continued support. We hope to serve you again soon!



# WARRANTY CARD

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_

Model # \_\_\_\_\_ Order # \_\_\_\_\_ Serial # \_\_\_\_\_

*The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **All information is strictly confidential.***

1. How did you learn about us?

Advertisement     Friend     Catalog  
 Card Deck     Website    Other: \_\_\_\_\_

2. Which of the following magazines do you subscribe to?

Cabinet Maker     Popular Mechanics     Today's Homeowner  
 Family Handyman     Popular Science     Wood  
 Hand Loader     Popular Woodworking     Wooden Boat  
 Handy     Practical Homeowner     Woodshop News  
 Home Shop Machinist     Precision Shooter     Woodsmith  
 Journal of Light Cont.     Projects in Metal     Woodwork  
 Live Steam     RC Modeler     Woodworker West  
 Model Airplane News     Rifle     Woodworker's Journal  
 Modeltec     Shop Notes     Other:  
 Old House Journal     Shotgun News

3. What is your annual household income?

\$20,000-\$29,000     \$30,000-\$39,000     \$40,000-\$49,000  
 \$50,000-\$59,000     \$60,000-\$69,000     \$70,000+

4. What is your age group?

20-29     30-39     40-49  
 50-59     60-69     70+

5. How long have you been a woodworker/metalworker?

0-2 Years     2-8 Years     8-20 Years     20+ Years

6. How many of your machines or tools are Grizzly?

0-2     3-5     6-9     10+

7. Do you think your machine represents a good value?     Yes     No

8. Would you recommend Grizzly Industrial to a friend?     Yes     No

9. Would you allow us to use your name as a reference for our customers in your area?

Note: *We never use names more than 3 times.*     Yes     No

10. Comments: \_\_\_\_\_

\_\_\_\_\_

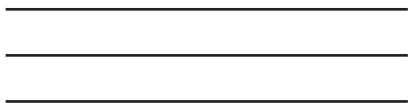
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TAPE ALONG EDGES--PLEASE DO NOT STAPLE